

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Rural Digital Opportunity Fund)	WC Docket No. 19-126
)	
Connect America Fund)	WC Docket No. 10-90
)	
)	

To: The Commission

COMMENTS OF HUGHES NETWORK SYSTEMS, LLC

Hughes Network Systems, LLC (“Hughes”) hereby responds to the Commission’s Notice of Proposed Rulemaking on the creation of a Rural Digital Opportunity Fund (“RDOF”) to bring access to broadband at speeds at or above 25 Mbps download and 3 Mbps upload (“25/3 service”) to the more than 10 million households and small businesses that still lack such access today.¹

Hughes, a U.S.-based satellite operator, is the largest United States and global satellite broadband with approximately 1.4 million customers across the Americas. Hughes operates three broadband satellites across the United States providing speeds of 25/3 Mbps to consumers. In addition, Hughes has under construction a new broadband satellite, which will be launched in 2021 and provide broadband speeds to U.S. consumers of approximately 100 Mbps in the continental United States. Hughes service is aimed at providing broadband service to users that are unserved or underserved by terrestrial broadband service.

As discussed in more detail below, Hughes supports the Commission’s goal of ensuring that all consumers have access to modern broadband services through the use of an incentive-

¹ *Rural Digital Opportunity Fund, Connect America Fund*, Notice of Proposed Rulemaking, FCC 19-77 (rel. Aug. 2, 2019) (“NPRM”).

based mechanism to minimize the contribution burden.² Hughes urges the Commission, however, to revisit the bid weights assigned to the performance tiers to reduce the excessive penalty proposed to be assigned to latency.

I. CLOSING THE DIGITAL DIVIDE IS A CRUCIAL GOAL

Hughes concurs in the Commission’s goal of “[c]losing the digital divide and bringing robust, affordable high-speed broadband to all Americans.”³ As the NPRM notes, by ensuring that all Americans have access to modern access to online resources, “we can help provide individuals living in rural America with the same opportunities as their urban counterparts.”⁴ As the largest provider of satellite consumer broadband services in North America, Hughes is working daily to advance this goal. As noted above, Hughes currently operates two next-generation high-capacity satellites that together provide broadband coverage at speeds of 25/3 or better throughout the continental United States, southern Alaska, the U.S. Virgin Islands, and Puerto Rico and is planning to launch its Jupiter 3 satellite in 2021, which provide speeds of approximately 100 Mbps to users throughout the continental United States.

Satellite broadband presents a particularly cost-effective option for providing high-speed broadband services at a reasonable cost, especially in areas where the costs of terrestrial facilities are prohibitively high.⁵ Satellite broadband service is an important element of the consumer

² NPRM at ¶ 13.

³ NPRM at ¶ 12.

⁴ *Id.*

⁵ See, e.g., *Connect America Fund, et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17838 ¶ 533 (2011), *aff’d sub nom. In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014) (“innovative technologies like satellite ... may be significantly less costly to deploy in these remote areas”).

broadband marketplace and must be part of the Commission’s strategy as it seeks to ensure access to high-quality service nationwide. Accordingly, as discussed below, the FCC should not be burdening satellite broadband users with unreasonable penalties.

II. A COMPETITIVE PROCESS WILL SERVE MORE CUSTOMERS WITHIN THE FINITE BUDGET

Hughes supports the Commission’s proposal to award support in the RDOF program through a reverse auction akin to the Connect America Fund (“CAF”) Phase II auction.⁶ The use of a properly structured competitive process will indeed “reduc[e] waste and inefficiency in the high cost program and promot[e] the use of incentive-based mechanisms to award support” and “minimiz[e] the contribution burden.”⁷ An auction process “enable[s] competition to drive down support amounts”⁸ to the level needed to ensure that service standards are met, and also helps ensure that the process selects the provider that is using the most efficient technology to serve a particular area. In particular, the proposed approach will allow the Commission to make informed decisions rationally weighting different performance levels against their relative costs in particular geographic areas.

III. THE PROPOSED LATENCY PENALTY IS EXCESSIVE

In order for the competitive bidding process to achieve the benefits discussed in the prior section, however, the Commission must ensure that the mechanism for weighting price against performance is properly calibrated. As proposed, the system would place too high a penalty on higher-latency offerings – 40 points out a possible 100-point bidding scale.⁹ The Commission

⁶ NPRM at ¶ 19.

⁷ *Id.* at ¶ 13.

⁸ *Id.* at ¶ 19.

⁹ *Id.* at ¶ 25.

should re-set the latency point value to 25, consistent with the structure used in the CAF-II auction.

Latency should not be heavily weighted in evaluating bids because latency does not have a significant negative impact on consumers' day-to-day usage of broadband services. As the Commission noted in the December 2018 *Measuring Broadband America Fixed Broadband Report*, while the higher latencies of geostationary satellite-based broadband “may affect the perceived quality of some interactive services such as phone calls over the Internet, video chat and video conferencing, or online multiplayer games, ... [n]ot all applications are affected by high latencies; for example, entertainment video streaming applications are tolerant of relatively high latencies.”¹⁰ Data show that the vast majority of consumer Internet traffic consists of non-latency sensitive applications including video downloads, web browsing, and email.¹¹

Coupled with strategic investments in greater satellite capacity, rising upload/download speeds, broadening coverage across the continental United States, and advancements in network engineering, satellite broadband internet is an excellent, cost-effective product for its nearly 1.9 million U.S. residential broadband customers,¹² and it continues to innovate and improve every day. Not surprisingly, satellite broadband customers are just as satisfied as the customers of

¹⁰ *Eighth Measuring Broadband America Fixed Broadband Report: A Report on Consumer Fixed Broadband Performance in the United States* at 8 (OET Dec. 2018), available at <https://data.fcc.gov/download/measuring-broadband-america/2018/2018-Fixed-Measuring-Broadband-America-Report.pdf>.

¹¹ See Cisco, Visual Networking Index: Forecast and Trends 2017-2022, at Table 15 (Feb. 27, 2019 update), available at https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white-paper-c11-741490.html#_Toc532256805. See also 2015 Measuring Broadband Report at 7 n.3 (“video streaming alone already accounts for more than 60 percent of peak downstream traffic over fixed broadband facilities in North America”).

¹² See *Internet Access Services: Status as of December 31, 2017* at 16 Fig. 11 (OEA Aug. 2019).

other types of broadband providers,¹³ and one leading satellite provider reports that a third of its current customer base had switched to its services from terrestrial broadband alternatives.¹⁴

The NPRM offers no rationale for its proposal to increase the latency penalty from 25 to 40 points; given the discussion above, no such increase is warranted. The Commission should set the latency point value in the RDOF auction no higher than the value of 25 used in the CAF Phase II auction.

IV. CONCLUSION

Hughes urges the Commission to move ahead with the proposed RDOF mechanism, to be allocated based on a competitively neutral reverse auction mechanism, consistent with these comments.

Respectfully submitted,

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¹³ *Ex Parte* Letter from L. Charles Keller, Attorney for Hughes Network Systems, Inc. to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (filed May. 11, 2016) (“Market research shows that satellite broadband customers are in the middle of the pack among all broadband customers in satisfaction levels. Data from Consumer Reports demonstrates that recent broadband consumer satisfaction surveys put ViaSat/WildBlue at or above the level of cable broadband and DSL.”); Comments of ViaSat, Inc., WC Docket Nos. 10-90, 14-58, 14-259, at 5-6 (filed July 21, 2016) (“ViaSat CAF Comments”) (“ViaSat’s satellite broadband service ... now has an overall user satisfaction rating that is on par with that of leading cable-based broadband service providers”).

¹⁴ ViaSat CAF Comments at 6.